

FIG.1

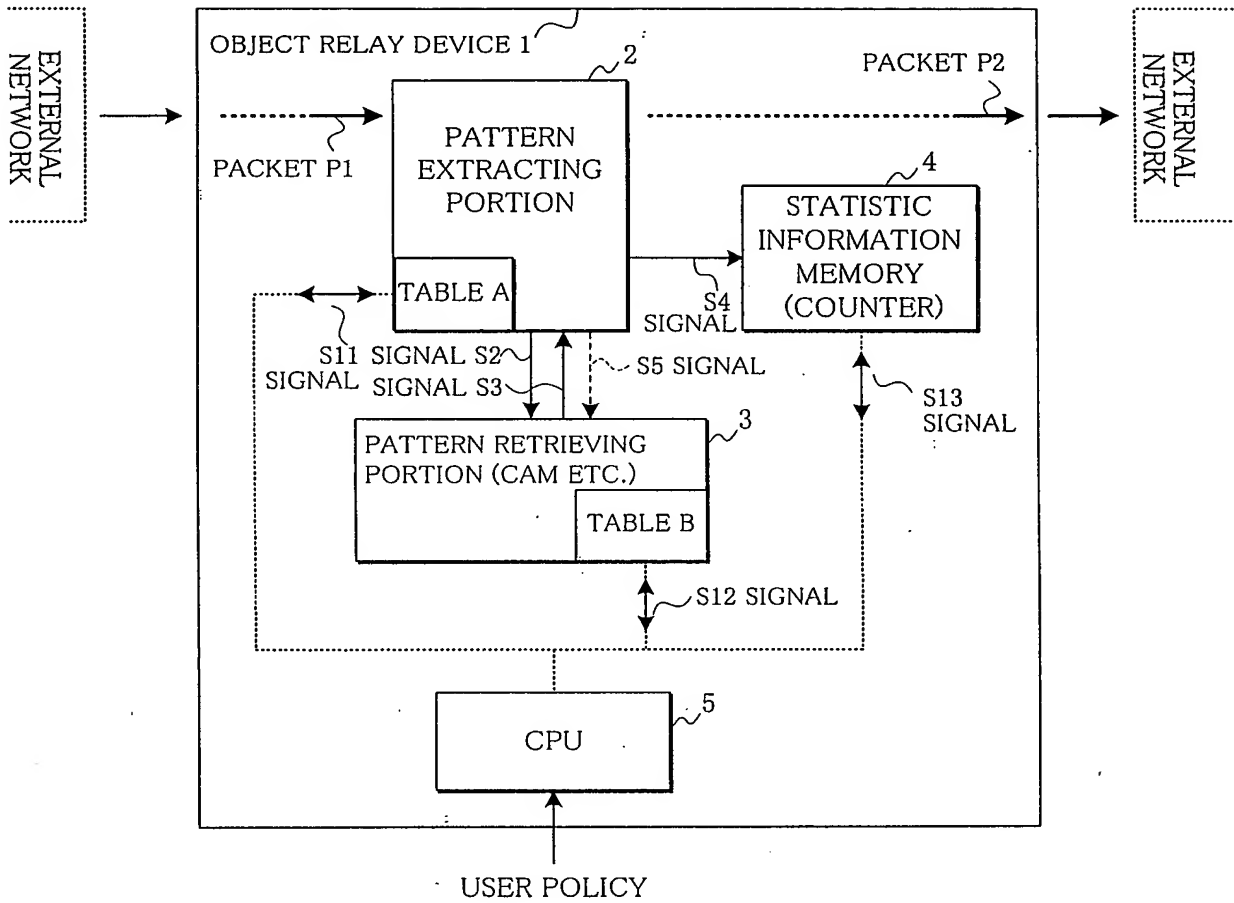


FIG.2

TABLE A (TABLE FOR REFLECTING USER POLICY TO PATTERN EXTRACTION)					
ENT	PACKET TYPE	ERROR TYPE	PATTERN EXTRACTION POSITION ( (OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2),... )	STATISTIC INFORMATION BASE ADDRESS	LEARNING FLAG
0					
1 (EX.1)	{ 0, 0800, 6 }	0 (ABSENCE)	{ (208, 32), (288, 16) }	80000000	0 (ABSENCE)
1 (EX.2)	{ 1, 0800, 6 }	1 (PRESENCE)	{ (116, 12), (240, 32), (320,16) }	80000000	1 (PRESENCE)
0					
※PACKET TYPE EXAMPLE: { (PRESENCE/ABSENCE OF TAG: 0 ABSENCE, 1 PRESENCE), (TYPE VALUE: 0x0800 (IP)), (PROTOCOL VALUE: 6 (TCP)) }					

FIG.3A

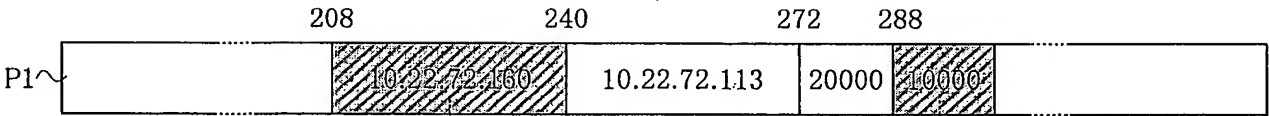


FIG.3B

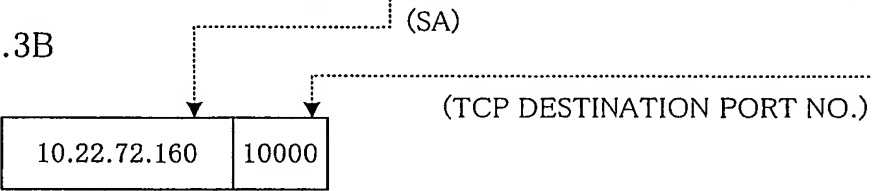


FIG.4A

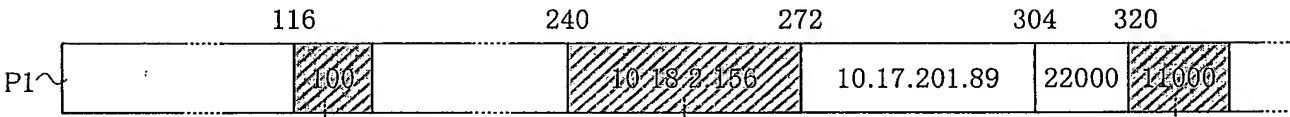


FIG.4B

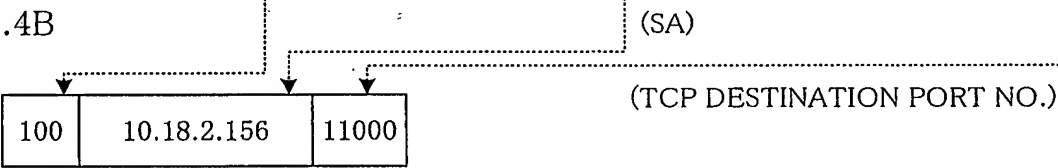


FIG.5

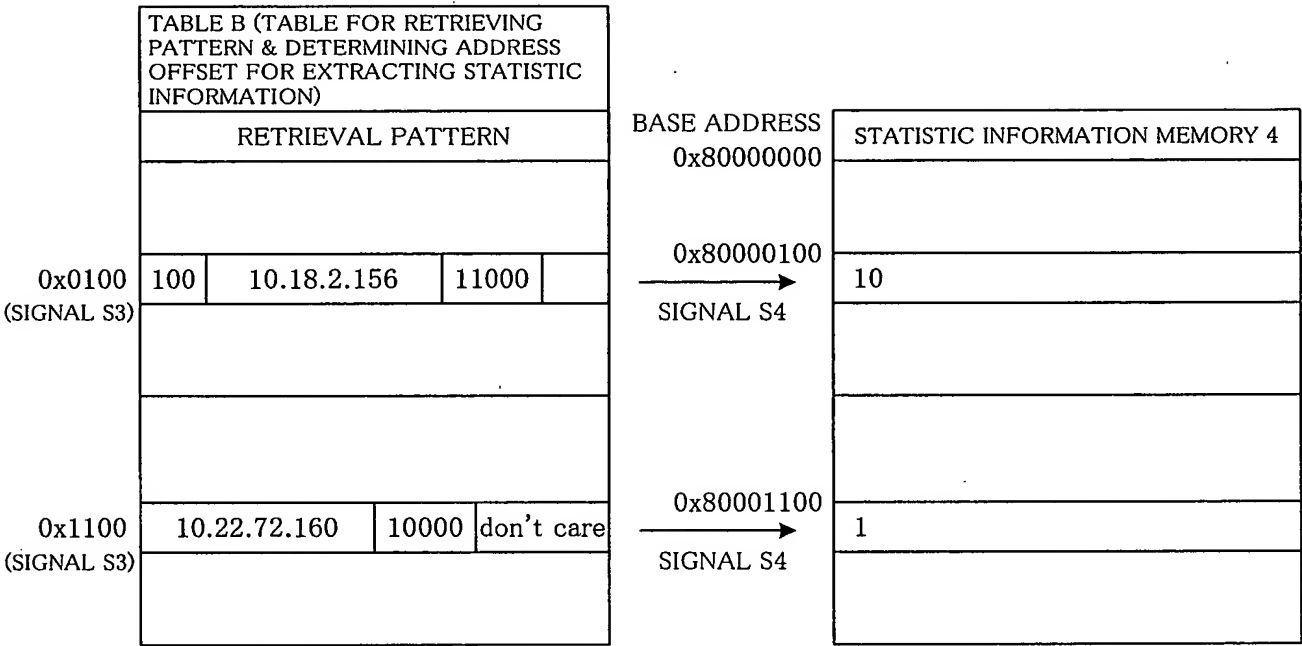


FIG.6A

PATTERN	TABLE A -1	
	{ PATTERN EXTRACTION POSITION (OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2), ...}	
(α)	{ (96, 16), (176, 8), (184, 8) }	
(β)	{ (96, 16), (128, 16), (208, 8), (216, 8) }	
	⋮	

FIG.6B

TABLE A -2			
ADDRESS	STATISTIC INFORMATION BASE ADDRESS	LEARNING FLAG	PATTERN EXTRACTION POSITION {(OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2),...}
0x0008 0x0009 0x000a	80000000	1 (PRESENCE)	{ (116, 12), (240, 32), (320, 16) }
	80000000	0 (ABSENCE)	{ (208, 32), (288, 16) }

FIG.7

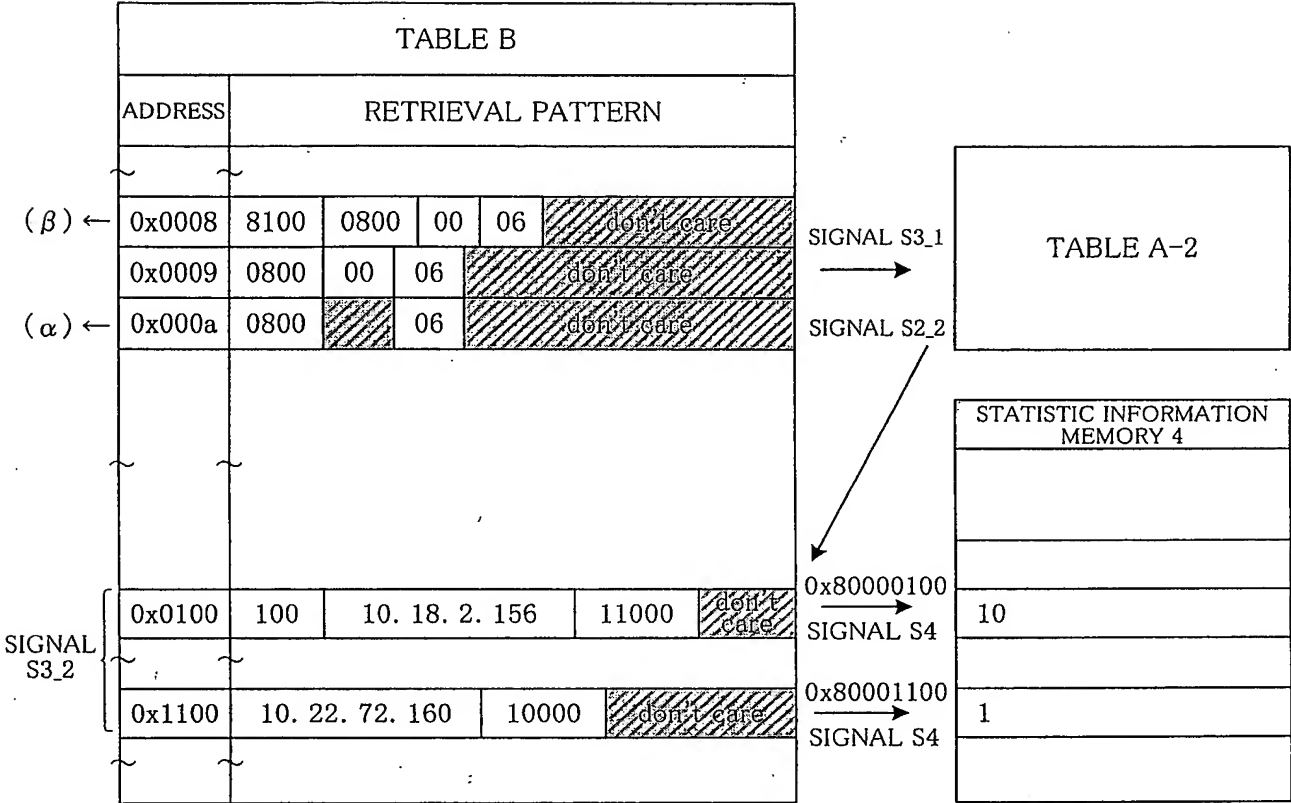


FIG.8

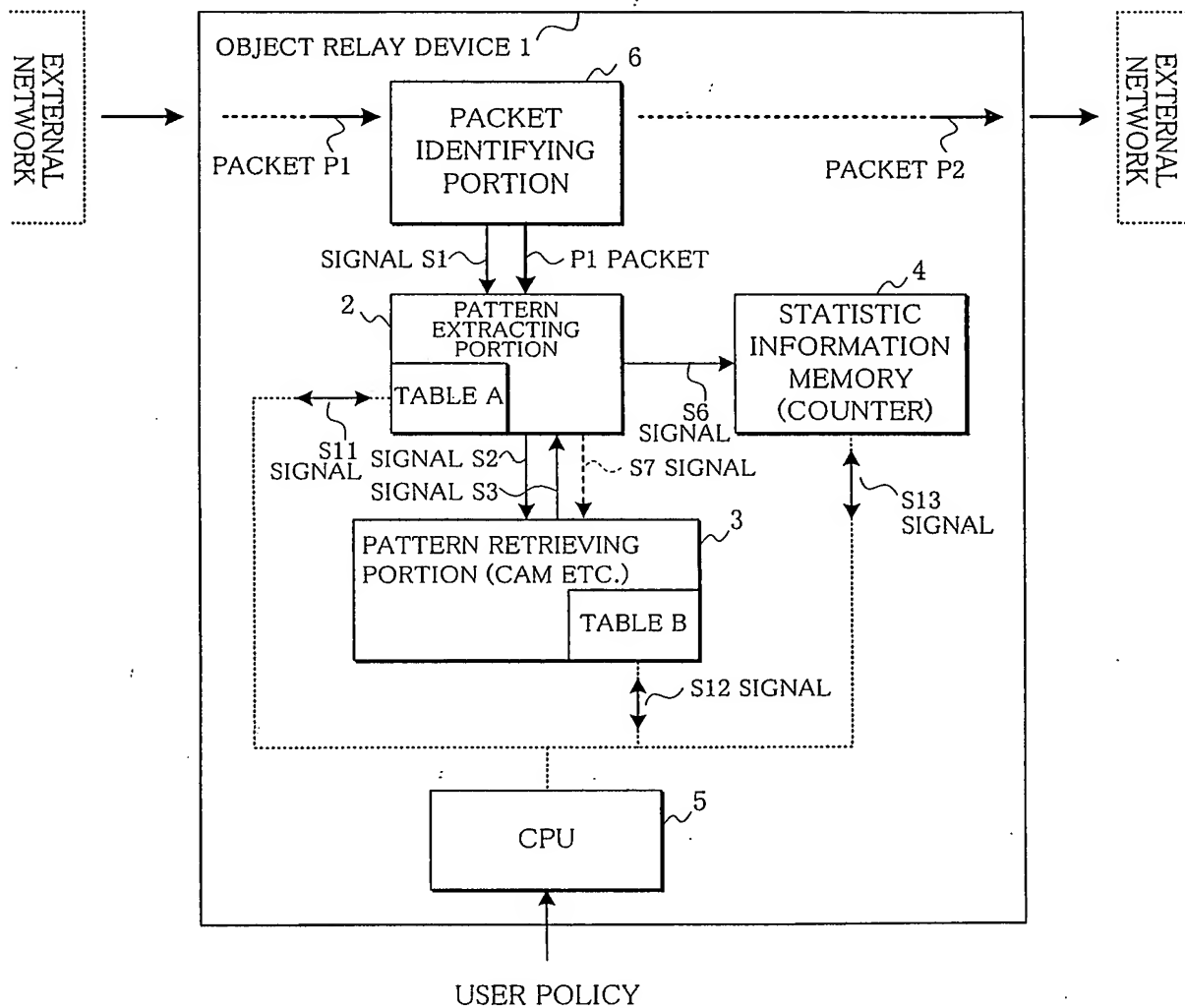


FIG.9

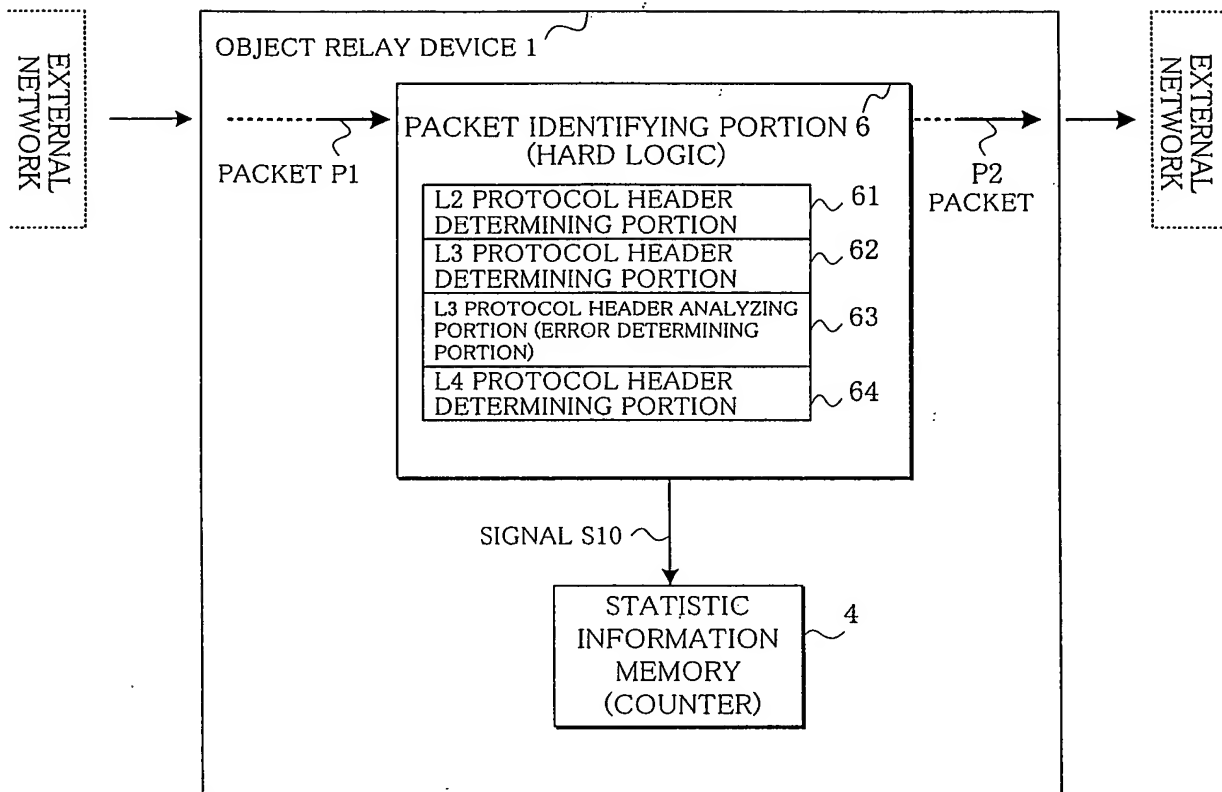


FIG.10A

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0				
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]							
MAC SOURCE ADDRESS [31:0]							FRAME TYPE/FRAME LENGTH					Ver	HEADER LENGTH	TOS					
TOTAL LENGTH				ID				FRAGMENT					TTL		PROTOCOL				
CHECKSUM				IP SOURCE ADDRESS								IP DESTINATION ADDRESS [31:16]							
IP DESTINATION ADDRESS [15:0]				SOURCE PORT NO.				DESTINATION PORT NO.				SEQUENCE NO.							
SEQUENCE NO.				ACKNOWLEDGEMENT NO.								OFFSET	RESERVED	5	4	3	2	1	0
WINDOW				CHECKSUM				URGENT POINTER											

FIG.10B

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0						
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]									
MAC SOURCE ADDRESS [31:0]								TAG IDENTIFIER [0x8100]				PRI		5		VID					
FRAME TYPE/FRAME LENGTH				Ver	HEADER LENGTH		TOS		TOTAL LENGTH				ID								
FRAGMENT				TTL		PROTOCOL		CHECKSUM				IP SOURCE ADDRESS [31:16]									
IP SOURCE ADDRESS [15:0]				IP DESTINATION ADDRESS								SOURCE PORT NO.									
DESTINATION PORT NO.				SEQUENCE NO.								ACKNOWLEDGEMENT NO.									
ACKNOWLEDGEMENT NO.				OFFSET		RESERVED		URG		ACK		TH		LS		ZF		WINDOW		CHECKSUM	
URGENT POINTER																					

FIG.10C

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0	
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]				
MAC SOURCE ADDRESS [31:0]							FRAME TYPE/FRAME LENGTH					Ver	HEADER LENGTH	TOS		
TOTAL LENGTH				ID				FRAGMENT					TTL		PROTOCOL	
CHECKSUM				IP SOURCE ADDRESS								IP DESTINATION ADDRESS [31:16]				
IP DESTINATION ADDRESS [15:0]				SOURCE PORT NO.				DESTINATION PORT NO.				LENGTH				
CHECKSUM																

FIG.10D

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0	
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]				
MAC SOURCE ADDRESS [31:0]								TAG IDENTIFIER [0x8100]				PRI 5		VID		
FRAME TYPE/FRAME LENGTH				Ver	HEADER LENGTH		TOS		TOTAL LENGTH				ID			
FRAGMENT				TTL		PROTOCOL		CHECKSUM				IP SOURCE ADDRESS [31:16]				
IP SOURCE ADDRESS [15:0]				IP DESTINATION ADDRESS								SOURCE PORT NO.				
DESTINATION PORT NO.				LENGTH				CHECKSUM								